

REMARKS

This Response is submitted in reply to the Final Office Action dated February 24, 2004. Claims 1 through 10 are pending in the patent application. Claim 9 has been amended for clarification purposes only and not for any reasons of patentability. No new matter has been added by this amendment. Claim 9 is objected to and claims 1-10 are rejected under 35 U.S.C. §103. Applicants respectfully submit, for the reasons set forth below, that the rejections have been overcome or are improper. Accordingly, Applicants respectfully request reconsideration of the patentability of claims 1 through 10.

As a preliminary matter, claim 9 was objected to as to an informality. Applicants have amended claim 9 to correct the informality. Therefore, Applicants respectfully submit that the objection to claim 9 is now moot.

Claims 1 through 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,623,613 to Rowe et al. ("*Rowe*") in view of Excel 5.0 for Windows ("*Excel 5.0*"). Applicants respectfully disagree with the Patent Office and submit that the combination of *Rowe* and *Excel 5.0* does not teach or suggest the elements of claims 1 through 10 for the reasons provided below.

The claimed invention is directed to an information processing apparatus, an information processing method and a recording medium which enables a user to more easily and efficiently search for information on an electronic music distribution system, a video on demand system, or similar systems for a desired content (See the Specification, page 1, lines 1 through 17). Specifically, the claims of the present invention are generally directed to a first display control device for controlling a display of a icon hierarchy including a plurality of first icons on a first hierarchical layer, a plurality of second icons on a second hierarchical layer (which are at a level lower than the first hierarchical layer), a plurality of third icons on the third hierarchical layer (which are at a level lower than the second hierarchical layer) and a plurality of fourth icons on a fourth hierarchical layer (which are at a level higher than the first hierarchical layer). The different hierarchical layers exhibit an array of icons where the first icons are displayed as a column or row on a screen and the second icons as another column or row on the screen. The number of the first icons displayed on the screen and the number of the second icons displayed on the screen are determined by the size of the display area on the screen. As described above, the first and second icons are arranged on the screen to form an array hierarchical structure. The

information processing method includes an icon specifying means such as a cursor for specifying a desired icon from the first and second icons displayed on the screen.

Additionally, the method includes a second display control device for changing the hierarchical structure displayed on the screen. This includes displaying the third icons to replace the second icons in the hierarchical structure on the screen and displaying the second icons to replace the first icons in the hierarchical structure on the screen when the icon specifying means or cursor specifies one of the second icons.

Moreover, the method includes displaying the fourth icons to replace the third icons in the hierarchical structure on the screen, displaying third icons to replace the second icons in the hierarchical structure on the screen and displaying the second icons to replace to the first icons in the hierarchical structure on the screen when the icon specifying device or cursor specifies one of the third icons in the hierarchical structure. Thus, the claimed invention moves and displays the different hierarchical layers to a user as the user indicates different icons associated with the hierarchical layers (See Figs. 9-12).

In the Final Office Action, the Patent Office states that the combination of *Rowe* and *Excel 5.0* teaches or suggests all of the elements of the claimed invention. Applicants respectfully submit that the combination of *Rowe* and *Excel 5.0* does not teach or suggest the elements of the claimed invention for the reasons provided below.

Rowe discloses a schedule display 50 including a category display 52, a subcategory display 54 and a program display 56 (See Figs. 2-4). Each of these three displays include a number of tiles representing categories, subcategories and programs. The schedule display also includes a program summary panel 90 for communicating detailed information about a selected tile from the programs. The Patent Office states that the program summary panel 90 discloses the "fourth icons" of the fourth hierarchical layer of the claimed invention. The program summary panel 90, however, does not disclose nor teach or suggest the fourth icons of the claimed invention.

The program summary panel 90 includes a preview section 92 and a text description section 94 (See Col. 14, lines 33-46). Specifically, the program summary panel 90 "is always available for viewing by the user, regardless of the type or class of programming information selected by the user." (Col. 14, lines 16-20). Thus, the program summary panel 90 describes detailed information for the schedule display 50 and remains on the display 50. Accordingly, the

program summary panel 90 does not replace the “third icons” of the program display 56 when the focus frame 60 is moved by a user. Therefore, the program summary panel 90 cannot be considered the same as the “fourth icons” of the claimed invention.

Additionally, the Patent Office states that *Rowe* discloses that the “number of first and second icons display on the display is based on what can be supported by the display screen (Col. 3, lines 23-29).” (See the Final Office Action, page 3). Applicants respectfully disagree with the Patent Office. Lines 23-29 of column 3 of *Rowe* provide the following:

The programming information is stored within one or more databases and is retrieveable to support the display of selected programming information on the display system. Specifically, the category tiles, subcategories tiles, and program tiles are stored within a database structure on a memory storage device and can be retrieved as required to support the display of programming information represented by these tiles.

Contrary to the statement by the Patent Office, the number of first and second icons displayed on the display in *Rowe* is not determined by the size of the display of *Rowe*. Instead, the particular section of *Rowe* at Column 3, lines 23-29 referred to by the Patent Office states that the programming information is stored in databases and retrieved to support the display of the programming information on the display. Therefore, when a user picks a particular tile or location on the display, the programming information for that tile, is retrieved from the data base and presented to the user. *Rowe* does not disclose, teach or suggest displaying different numbers of columns or tiles on the display based on the actual size of the display. Therefore, *Rowe* does not disclose, teach or suggest the elements of the claimed invention.

Moreover, the invention disclosed by *Rowe* simplifies the programming information available to a user so the user can easily see the information and select a category from the displayed information (Col. 2, lines 10-16). Specifically, *Rowe* displays a schedule for programming information “based primarily upon the classes of programs, rather than the time period for each program.” (Col. 2, lines 17-23). *Rowe* specifically restricts the program information displayed by the systems to those programs matching characteristics selected by the viewer or user. Thus, the system enables the user to narrow the scope of the programming information supplied by the system to a more manageable number of choices.

Specifically as described above, *Rowe* discloses that the scheduled information is limited to three primary display elements: a category display 52, a subcategory display 54 and a program

display 56 (Col. 2, lines 51-56; Figs. 2-4). A view panel 58 is positioned in a fixed location on a central portion of the schedule display 50. The user manipulates a focus frame 60 which moves horizontally along the viewing panel 58. The programming information is presented by each of the displays 52, 54 and 56 using tiles where each tile represents a specific item of programming information. The user moves the focus frame horizontally from one display to the next and selects one of the tiles in either the category display 52, the subcategory display 54 or the program display 56. The user then can vertically scroll through each of the tiles in the selected category to find specific programming information (Col. 8, lines 7-21). *Rowe* does not disclose, teach or suggest providing programming information that includes more than three columns. In fact, *Rowe* teaches away from such a display because providing a display with more than three columns would add additional information on the display and thereby make the display more complex and less user friendly for a viewer to manipulate and find specific programming information.

Moreover, the Patent Office refers to *Excel 5.0* for disclosing means for manipulating the focus frame from the left to the right to view different columns in a spreadsheet. However, as described above, *Rowe* does not disclose, teach or suggest providing multiple columns of program information to a user because doing such would unnecessarily complicate the program display. Additionally, *Rowe* discloses that a viewer or user can scroll vertically on the display to view different tiles within a selected category. Thus, a person of ordinary skill in the art would not be motivated to combine *Rowe* with *Excel 5.0* where *Rowe* does not teach or suggest providing multiple columns in the program display and where *Rowe* already discloses that a viewer or user can scroll or move the focus frame along the program display.

As described above, *Rowe* discloses "scrolling the category tile 62 in a selected vertical direction" to sequentially reveal category tiles appearing within the view panel 58. (See Col. 9, lines 54-59). *Rowe* therefore discloses vertically scrolling the focus frame 60 to reveal additional tiles within the categories on the display. Therefore, a person with ordinary skill in the art would not combine *Rowe* with the *Excel 5.0* to horizontally scroll the focus frame to reveal further columns where *Rowe* does not disclose providing additional columns other than those already included on the display and where *Rowe* already discloses the ability to vertically scroll on the screen to reveal other tiles on the screen.

Even if *Rowe* were combined with *Excel 5.0*, the combination does not teach or suggest the elements of the claims of the present invention. As described above, *Rowe* does not disclose, teach or suggest that the program display 56 includes more than three columns or that *Rowe* provides columns of program information not included on the screen. In fact, providing such a display would complicate the programming information provided to the viewer and teach away from the essence of the invention of *Rowe*. Therefore, the combination of *Rowe* and *Excel 5.0* does not disclose, teach or suggest all of the elements of the claimed invention and specifically does not teach or suggest a method that displays a plurality of fourth icons which replace third icons in an array hierarchical structure on a screen, displays third icons that replace the second icons in the array hierarchical structure on the screen and display second icons that replace first icons on the array hierarchical structure on the screen when the icons specifying specifies one of the third icons in the hierarchical structure.

For all of these reasons, the combination of *Rowe* and *Excel 5.0* does not disclose, teach or suggest all of the elements of the independent claims 1, 9 and 10. Therefore, claims 1, 9 and 10, and claims 2 through 8 which depend from claim 1, are each patentably distinguished from the combination of *Rowe* and *Excel 5.0* and are in condition for allowance.

Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Rowe* in view of *Excel 5.0* and in further view of Designing the User Interface by Ben Shneiderman ("*Designing the User Interface*"). Claim 8 depends from amended claim 1. Therefore, Applicants respectfully submit that claim 8 is allowable for at least the reasons set forth above with respect to independent claim 1 and because the combination of *Rowe*, *Excel 5.0* and *Designing the User Interface* does not disclose, teach or suggest the novel element of claim 8 in combination with the novel elements of claim 1.

In light of the above, Applicants respectfully submit that claims 1 through 10 are patentable and non-obvious over the art of record because the cited references, either alone or in combination, do not disclose, teach or suggest the claimed invention. Accordingly, Applicants respectfully request that claims 1 through 10 be deemed allowable at this time and that a timely Notice of Allowance be issued in this case.

No fees are due in this case. If any other fees are due in connect with this application as a whole, the Patent Office is authorized to deduct the fees from Deposit Account No. 02-1818. If

such a withdrawal is made, please indicate the Attorney Docket No. (112857-072) on the account statement.

Respectfully submitted, *

BELL, BOYD & LLOYD LLC

BY



Christopher S. Hermanson

Reg. No. 48,244

P.O. Box 1135

Chicago, Illinois 60690-1135

Phone: (312) 807-4225

Dated: April 7, 2004